

APPENDIX I:

SPECIFICATION AMENDMENTS:

Amend pages 26, 33 and 34 of the specification as set forth the following:

On page 26:

- Delete the paragraph beginning in indicated line 4 and ending in indicated line 6 and insert in its stead:

At a reactor temperature of 255°C, a pressure of 5 bar and a catalyst hourly space velocity of 0.27 kg/L_{cath} at a hydrogen: MA molar ratio of 85:1, a reaction effluent of the composition: 91% of GBL, 5% of THF, 1% of BDO and 1% of ~~BSA~~ SA

On pages 33 and 34:

- Delete the text beginning on page 33 in indicated line 4 and ending on page 34 in indicated line 2 and insert in its stead:

~~The present invention relates to a process for preparing optionally~~
Optionally alkyl-substituted 1,4-butanediol is prepared from C₄-dicarboxylic acids and/or of derivatives thereof by two-stage catalytic hydrogenation in the gas phase of C₄-dicarboxylic acids and/or of derivatives thereof having the following steps:

- ~~a) catalytically hydrogenating introducing a gas stream of a the C₄-dicarboxylic acid or of a the derivative thereof at from 200 to 300°C and from 2 to 60 bar into in a first reactor and catalytically hydrogenating it in the gas phase to obtain a product which contains mainly optionally alkyl-substituted γ -butyrolactone;~~
- ~~b) removing succinic anhydride from the product of obtained in step a), preferably to a residual level of from < about 0.3 to 0.2% by weight;~~
- ~~c) catalytically hydrogenating introducing the product stream obtained in of step b) in into a second reactor at a temperature of from 150°C to 240°C and a pressure of from 15 to 100 bar and catalytically hydrogenating it in the gas phase to obtain optionally alkyl-substituted 1,4-butanediol;~~

- d) removing the desired product from intermediates, by-products and any unconverted reactants; and
- e) optionally recycling unconverted intermediates into one or both hydrogenation stages₇.

The catalysts employed in each of the said hydrogenation stages
~~each using a catalyst which comprises~~ comprise \leq 95% by weight, ~~preferably from 5 to 95% by weight, in particular from 10 to 80% by weight,~~
of CuO, and \geq 5% by weight, ~~preferably from 5 to 95% by weight, in particular from 20 to 90% by weight,~~ of an oxidic support, and ~~said~~ the second reactor ~~having~~ has a higher pressure than ~~said~~ the first reactor.